

Date: Sat, 24 Sep 94 04:30:25 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #283
To: Ham-Homebrew

Ham-Homebrew Digest Sat, 24 Sep 94 Volume 94 : Issue 283

Today's Topics:

 2m/70cm 'plexer
 Homebrew Antennas
 Plans for 2M 50W solid state amp
 Please Recommend An Intro. Radio Book (2 msgs)
 Quads and baluns?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Sep 1994 14:22:56 GMT
From: yuma!galen@purdue.edu
Subject: 2m/70cm 'plexer
To: ham-homebrew@ucsd.edu

Date: Thu, 22 Sep 94 22:14:31 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: Homebrew Antennas
To: ham-homebrew@ucsd.edu

You do not indicate for what frequency you are looking for. If, per chance,
you are interested in a 2M vertical-dipole, I have a copy of an article in
July 1993 "QST". The antenna "collapses to a package just 18" long and
3 inches wide". The article has pictures of the antenna set up and collapsed.

I would be happy to fax/snail mail you a copy if you cannot locate that issue of "QST". I have not yet built this one, but it will be a winter project for me.

Glad I could help.

73's

John/KE4KPV

Date: 23 Sep 94 14:24:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Plans for 2M 50W solid state amp
To: ham-homebrew@ucsd.edu

--Boundary (ID 2+aB7dyVtEJniohzoY1g2w)
Content-type: TEXT/PLAIN

In digest 281 Jay Porter writes:

>I am looking for information or plans for building a 50W solid state
>amp for use in the 2m or 2m/440 bands. I am interested both in complete
>circuit diagrams or suggestions for power transistors that I can use to
>build these amps. Any information would be appreciated. Thanks.

>

>

>Jay Porter
>Texas A&M University
>j-porter@tamu.edu

Jay,
Check some of the OLD ARRL handbooks (early 80's and late 70's).
They had a couple of amps (FM) that you might be interested in.
One was a 10-15W for handytalky and one was a 10W in 60W out.
Both were solid state and used fairly common transistors. If you
can't get one of these handbooks I'd be glad to FAX or snail-mail
you a copy of them.

Kevin

Legal stuff:

The above opinions are my own and not necessarily those of the staff,
faculty, administration, or lab animals (woof!) of The University of
Texas Health Science Center at San Antonio or anyone else who is not

me.

Kevin R. Muenzler, WB5RUE The University of Texas Health
muenzlerk@uthscsa.edu Science Center at San Antonio,
 Department of Computing Resources

 ** There is no such thing as a Monkey-Proof Program! **
 ** I can prove it! **

 | I am Voltohm of Borg!
 | Resistance is E/I!
 | Power is EI!

--Boundary (ID 2+aB7dyVtEJniohzoY1g2w)--

Date: 22 Sep 1994 22:58:22 GMT
From: agate!howland.reston.ans.net!usc!nic-nac.CSU.net!einstein!browere@ames.arpa
Subject: Please Recommend An Intro. Radio Book
To: ham-homebrew@ucsd.edu

I am very interested in how radio receivers/transmitters work and would like someone to recommend a beginner book that is not infantile and does contain experimentation circuits.

Preferably a readily available book.

Thank you,
Eric

Date: 22 Sep 1994 23:15:39 GMT
From: darwin.sura.net!howland.reston.ans.net!europa.eng.gtefsd.com!
sundog.tiac.net!usenet.elf.com!rpi!marcus.its.rpi.edu!lascal@seismo.css.gov
Subject: Please Recommend An Intro. Radio Book
To: ham-homebrew@ucsd.edu

Eric B. (browere@einstein.cs.ucdavis.edu) wrote:
: I am very interested in how radio receivers/transmitters work and would
: like someone to recommend a beginner book that is not infantile and
: does contain experimentation circuits.

I would suggest "solid state design for the radio amateur" (I think that's the title.. I don't have a copy myself) published by the ARRL. I think it's merely \$12 or so, and has lots of practical circuits as

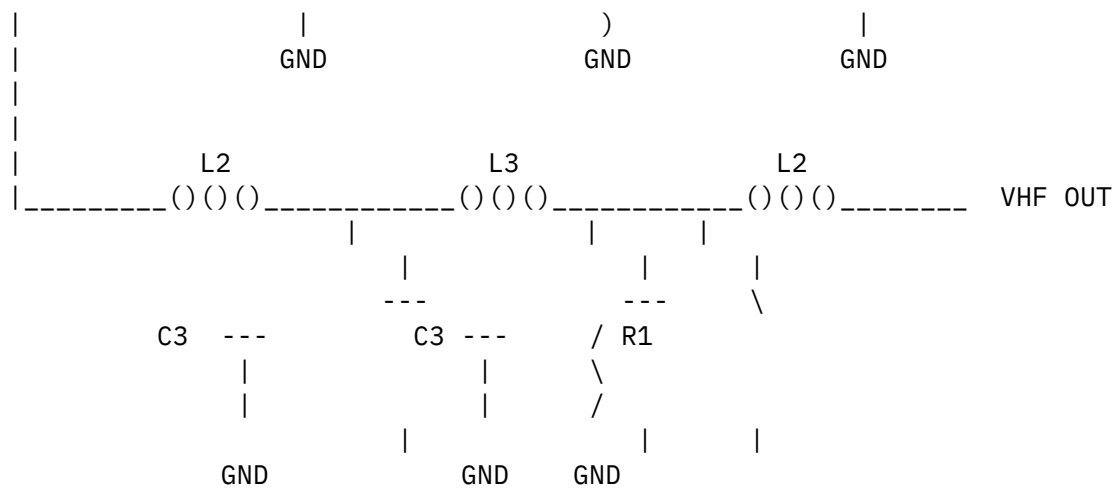
- Lance

Lance Lascari WS2B <lascal@rpi.edu> Senior EE @ Rensselaer Polytechnic Inst.
Mount Greylock Expeditionary Force Secret agent #52,342

Ron
N5HYH
KZEP-AM/FM

IN

UHF OUT



Where:

C1: 4.8 pF
 C2: 3.3 pF
 C3: 15 pF
 L1: 2 turns #14, 3/16" dia.
 L2: 4 turns #14, 3/16" dia.
 L3: 5 turns #14, 1/4" dia.
 R1: 50k, 1/2 w.

I built mine over a solid pc board and wound both L2's and L3 from one piece of wire. I built up the caps from three to four cer disc caps each, I used four for C1 in parallel.

73, Galen, KF0YJ

 Date: Thu, 22 Sep 1994 12:11:30 GMT
 From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!
 utnut!torn!nott!cunews!freenet.carleton.ca!FreeNet.Carleton.CA!
 ae517@network.ucsd.edu
 To: ham-homebrew@ucsd.edu

References <1994Sep20.134027.17693@arrl.org>, <CwFwuA.96u@odin.corp.sgi.com>,
 <CwHI7G.7M1@freenet.carleton.ca>ton.ca
 Reply-To : ae517@FreeNet.Carleton.CA (Russ Renaud)
 Subject : Re: Reuse surface mount parts?

In a previous article, jeffrey@kahuna.tmc.edu (Jeffrey Herman) says:

>>Heat guns sold at the hardware store to strip paint, etc are generally hot

>>enough to melt solder.

>

>I've always used a heatsink (needle nose pliers) when soldering
>transistors. Are IC's so heat resistant that no heatsink is
>necessary to prevent damage? How would you heatsink *all* the
>leads of the device at the same time?

>

>

>Jeff NH6IL

They don't put a heat sink on all the leads of the device when the devices are wave-soldered during the manufacturing process. These days, it's only the very delicate devices that are hand-soldered onto the board, everything else is wave-soldered. Last visit to an electronics manufacturing facility, there was even a machine that automated that process! The SMT facility was simply amazing, as well.

73

Russ va3rr/aa8lu

Date: 22 Sep 1994 19:00:26 GMT

From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!ceylon!news2.near.net!usenet.elf.com!rpi!marcus.its.rpi.edu!lascal@network.ucsd.edu

To: ham-homebrew@ucsd.edu

References <35s400\$2pgu@yuma.ACNS.ColoState.EDU>, <35s7i6\$8v@usenet.rpi.edu>, <35sf3g\$128a@yuma.ACNS.ColoState.EDU>.net

Subject : Re: 2m/70cm 'plexer (DU and DI)

Galen Watts (galen@picea.CFNR.ColoState.EDU) wrote:

: I looked it up (ARRL Handbook,1987): 'A duplexer is a device that allows the
: repeater transmitter and receiver to be connected to the same antenna.
: ...a duplexer will allow the signal from the antenna to reach the receiver
: while blocking energy from the transmitter.'

: The diagram I posted will (and does) work as a 2m/440 DUplexer. It will
: not work as a 2m duplexer, nor will it work as a 440 duplexer.

: DIPLEX: (Webster's Ninth) 'Relating to or being simultaneous transmission
: or reception of two radio signals using a common feature (as a single carrier
: or single antenna)'
: (quoted as written, even though I think it's oddly worded)

: It does that (2m/440 DIplexer), too.

Not to sound like a pyrotechnician, but I've never seen a dual band repeater that was not symmetrical in the sense that it was 2 repeaters that did not both transmit and receive at the same time. A link might do that, but why would a repeater? I could go on at length what would be annoying and problematic with this.

Like I said... I was interested in clearing up the terminology. I'm not sure what point has been made.

as a reminder, here is one of the early requests:

>Please put me on the list of recipients for duplexer construction mail! I am
>interested in 2M and 70cm duplexers, but I have not found sufficient design
>and construction articles.

My interpretation of this, since 2 bands are mentioned and duplexers is plural, is that the interest is in duplexer design.

-Lance, go ahead.... flame away

--

Lance Lascari WS2B <lascal@rpi.edu> Senior EE @ Rensselaer Polytechnic Inst.
Mount Greylock Expeditionairy Farce Secret agent #52,342

Date: 23 Sep 94 09:37:30 CDT
From: equalizer!timbuk.cray.com!walter.cray.com!jwl@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <CwFwuA.96u@odin.corp.sgi.com>, <CwHI7G.7M1@freenet.carleton.ca>,
<780219223snz@ifwtech.demon.co.uk>
Reply-To : jwl@cray.com
Subject : Re: Reuse surface mount parts?

Ian G3SEK (G3SEK@ifwtech.demon.co.uk) wrote:

: In a previous article Russ Renaud VA3RR/AA8LU wrote:
: >
: > In a previous article, charlos@rivm.nl (Charlos Potma) says:
: >
(much interesting info deleted)
: If you want to keep the board but not the IC (as in a repair), your main
: priority is to protect the tracks which are very fragile. Snip the legs of
: the IC off, one at a time, using very fine-nosed cutters which don't lever
: against the body of the IC and tear up the tracks. Then carefully desolder
: the loose bits from the individual tracks.

: If you want to keep both the board and the IC, use the wire method, but work
: v e r y s l o w l y and carefully to avoid tearing the tracks.

: Hope this helps you decide which is the best way...

: --

: 73 from Ian G3SEK | Editor, The VHF/UHF DX Book
: Abingdon, England |
: g3sek@ifwtech.demon.co.uk | "In Practice" columnist for RadCom (RSGB)

Just an observation, I have used a Dremel tool with a cutting disk to
cut the old part away. It is quite a bit quicker for things like 40 pin
ICs, but not if you have to go find the Dremel. 8^)

--

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End of Ham-Homebrew Digest V94 #283
